

| — A helix — | | — C helix — |

SWMb	V1.	SEGEWOLVLHVWAKVEADVA	GHDQDILTRLEKSHFETLEK	42
HemAT-Hs	MSNDNDTLVTADVRNGIDGHALADRISIDE	AETIAWRLSETGHDDETMALAAEOPBLEAT	60	
HemAT-Bs	WIFKKDRKQETAXFSDSNGQOKN-RIQLTNKHADVKKQLKMQVRGGDAELIVLLEQLQPLIOPEN		61	

| D helix || — E helix — | — F helix — |

SWMb	*	FDRKEHLKPFPEFMKASEDLKKHGTVL	TALGAILRK-KGHHEAE	92
HemAT-Hs	ADAELVTDFE-YDHLESYERTQDILEANSTKTE	VEOLKETOAEYILGLGRGEYDTSYAAQRARISKI	122	
HemAT-Bs	IVNLFVDAF-YKNLDDESSLMDITI	-NDHSSVDRLKOTLKRHLOEMFAGVIEDDEFIEKBNRIASI	122	

| — G helix — | — H helix — |

SWMb	*	HATKHKIPIKYLEFISPAIIHVLSRHPGD	GADAQGAMNKALELFRKDIAA-KXKELGYOG	153
HemAT-Hs	HDVIGLGPDVYLGLAYTRYYTGLLDALADDVVA	DRGEEAAAADDELVARFLPMLKILTEDOOF	184	
HemAT-Bs	HLRIGLLPKWYMGAFQELLSSMIDTY	EASITNQQELKAIKATTKLNLQOQL	175	

SWMb SEQ. ID. No. 76
 HemAT-Hs SEQ. ID. No. 77
 HemAT-Bs SEQ. ID. No. 78

a

K1

Tsr	LMRTVGDVNRGANATYSGASEIATGNNDLSSRTEQQASLEETAASMEOLTATVKONAENAR	***	324
HemAT-Hs	LEATSQDVAERTDTMRARTDDOVRMADVSEIISVSASVEEVASTADDVRRTSEDAAALAQ		283
HemAT-Bs	LHQKIOETSGSIANLESETSRSVQELVDKSEGISOASKAGTVTSSTVEEKSIKGKKELEVQO		259

HCD

Tsr	QASHIALSASETAQRGKVVNVWQTMRDISSSSQKIAIDIISVIDGIAFQTNLALNAAVEA	***	386
HemAT-Hs	QEAEAAAADDALATMTDIDEATDCVTAGVEOLGERAADVESVTGVIDDIAEQTNMLALNASIEA		345
HemAT-Bs	K-----QMNCIDTSLVQIEKEMVKLDIAQCIKIEFGLVTGIAEQTNILSLNASIES		311

HCD

Tsr	ARAGEQGRGFAVVAGEVRNLQRSQAQAAAREIKSLIEDSVGKVDVGSTLVE SAGETMAETVSA	***	448
HemAT-Hs	ARAGEAGEGFAVVADEVKALAEFSREQSTRVVELVEQMQAETEETVDQDLEVNQRTGEGVER		407
HemAT-Bs	ARAGEHKGFAVVAEVRLKSEDTKKTVSTVSELV-----NNNTNTQINIVSKHIKDVNEL		366

R1

Tsr	VTRVTDIMGEIASASDEQSRGIDQVGLAVAEMDRVTOQNAALVEESAAAAAADEEQASRLTE	***	510
HemAT-Hs	VEEAMETLQEITDAVEDAASGMQEVSTATDEQAVSTEEVAEMVDCVDDRAGEIAAALDDID		469
HemAT-Bs	VSESKEKMTQINRILEDETVHSMKTSKEQSGKIDVQDQFLGGLQEVSRAVSHVAASVDSLVI		428

Tsr	AVAVFRIQDQORETSAVVKTVTPAAP	SEQ. ID. No. 79	536
HemAT-Hs	AT-----DQOVRTVEEVRETVKLIS	SEQ. ID. No. 80	489
HemAT-Bs	LT-----BE	SEQ. ID. No. 81	432

b

FIGURE 1

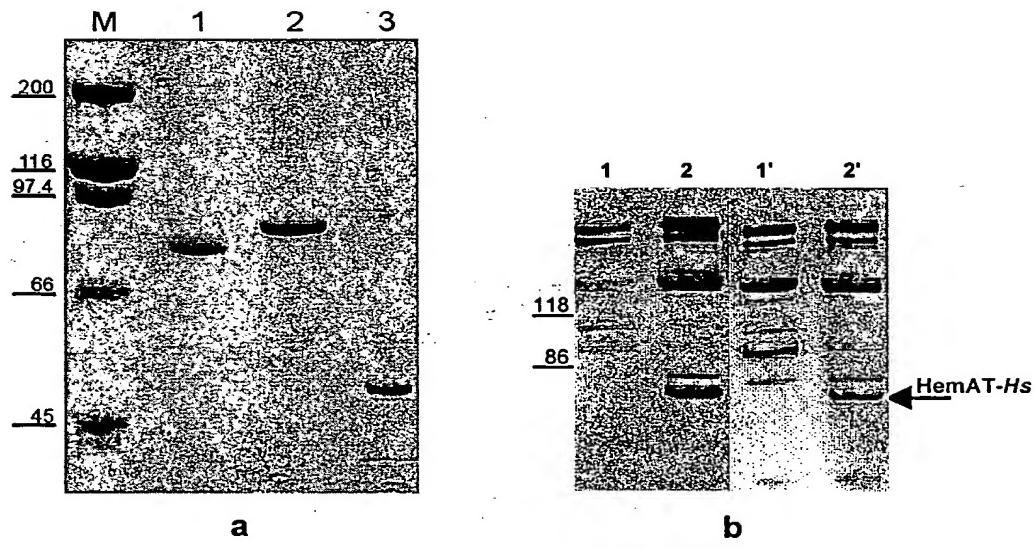


FIGURE 2

Myoglobin-like Protein (MbLP)

GQDVLVVLIKXHPLIQEKIXXFDFFKH

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

AQRXRLAQIHAXKGKIPDWYL

M1-box

SEQ. ID. No. 82

M2-box

SEQ. ID. No. 83

TEMPLATE

I K X T V P V L X E H G X X I

G Q D V L V V L I K X N P E I Q E K F F F K H

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXX

A Q R X R L A Q I H A X K G K I P D W Y L

H-box

SEQ. ID. No. 84

M1-box

SEQ. ID. No. 85

M2-box

SEQ. ID. No. 86

Figure 1 The two sequences used in the analyses. M1 and M2 are the site of myoglobin recognition. M2 is the site of HemAT recognition. The H-box is the site primarily of microbial hemoglobin recognition.

FIGURE 3

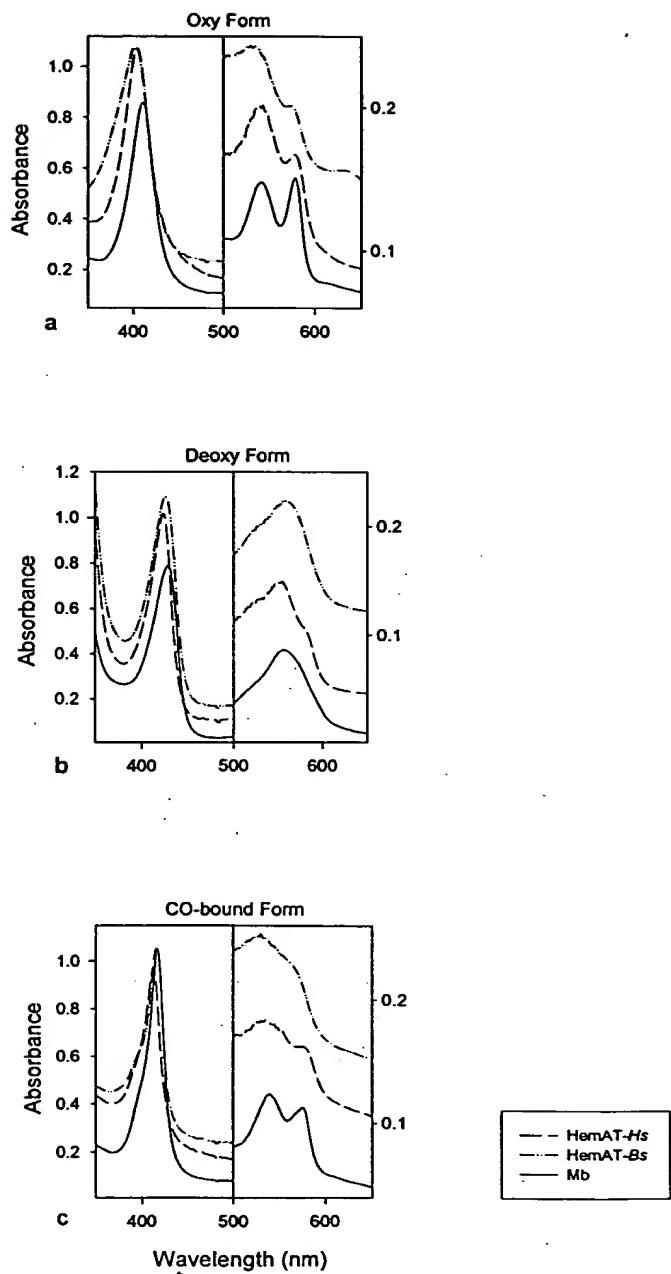


FIGURE 4

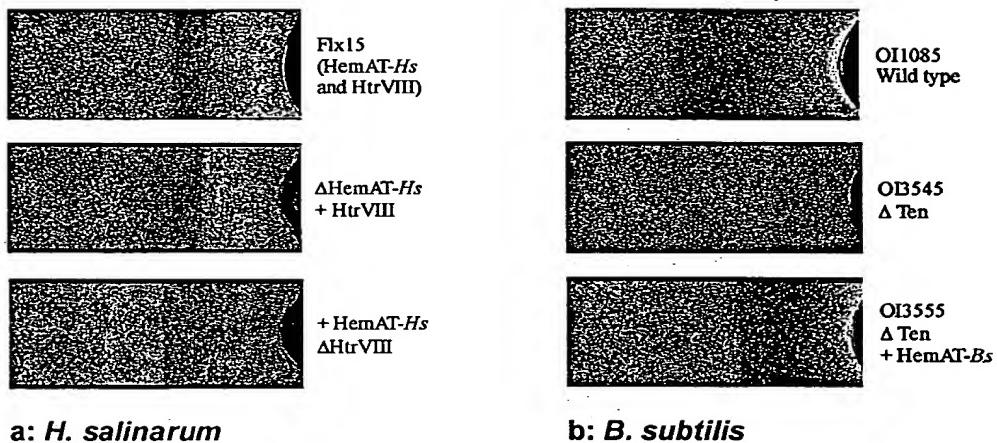


FIGURE 5

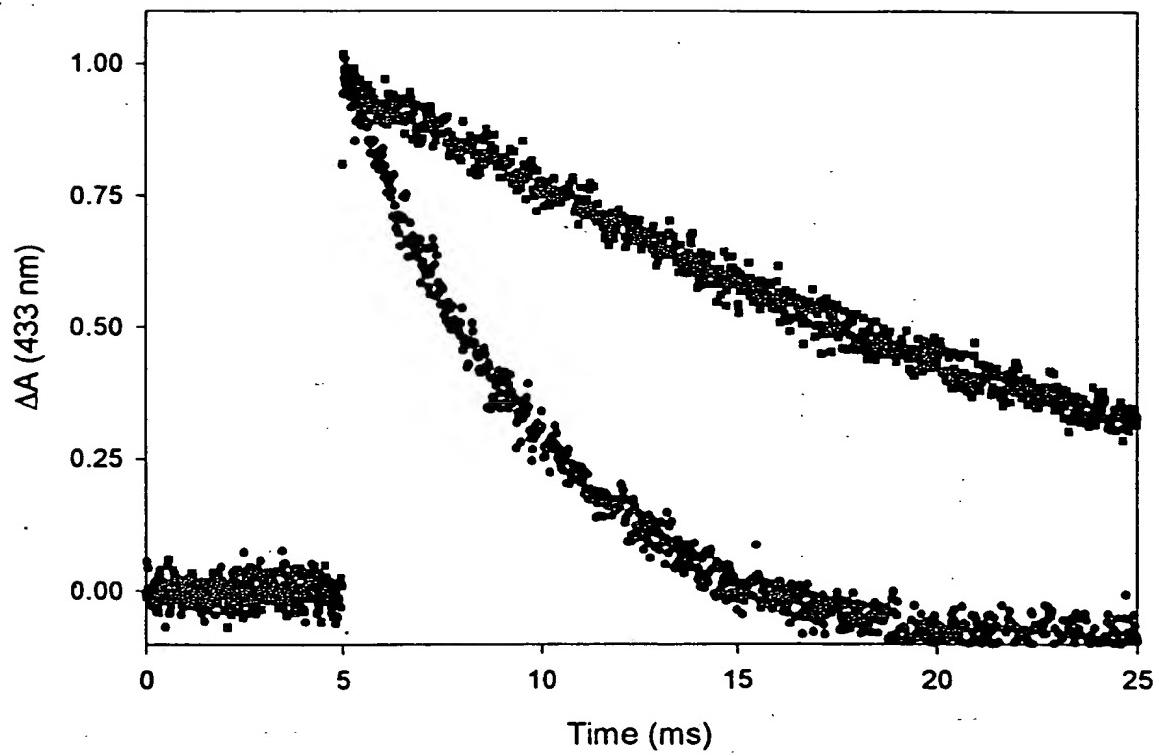


FIGURE 6

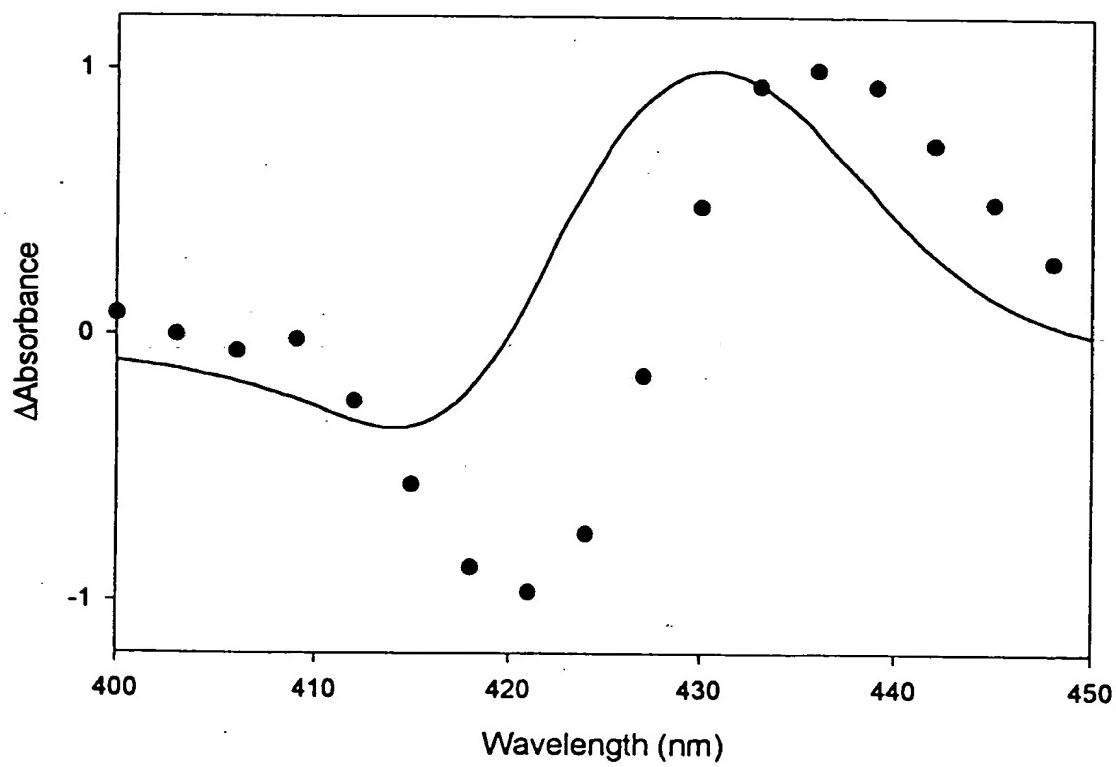
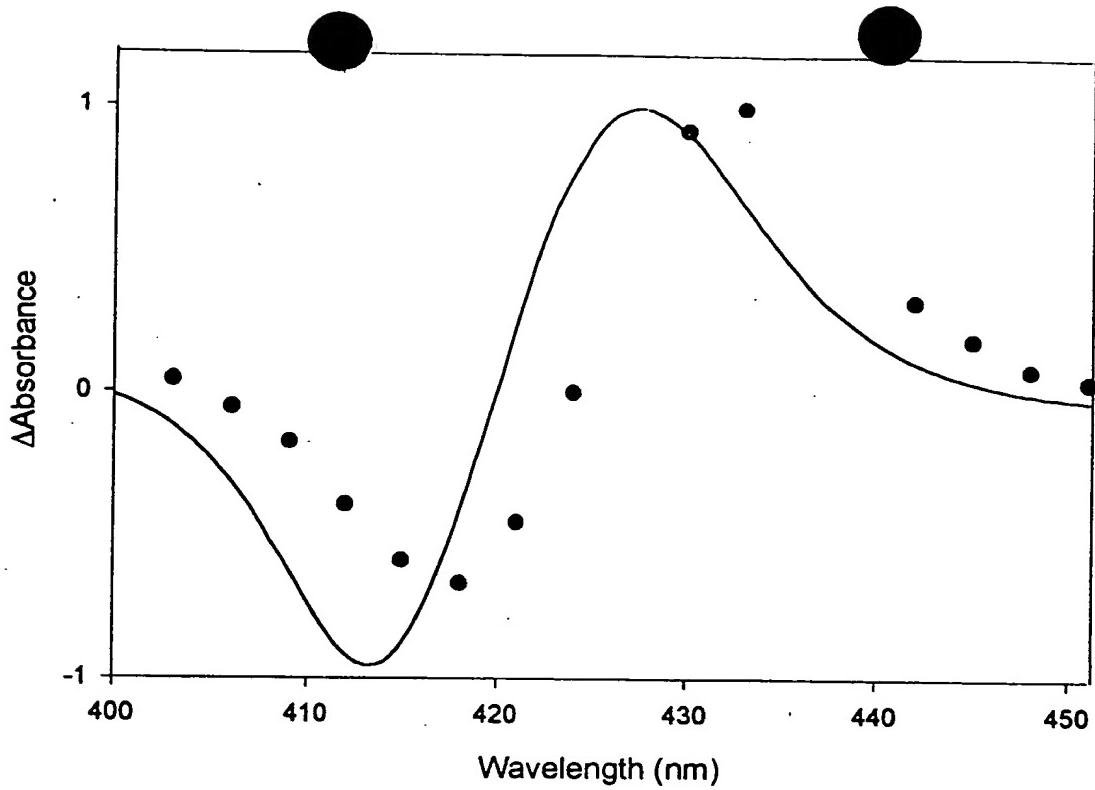


FIGURE 7

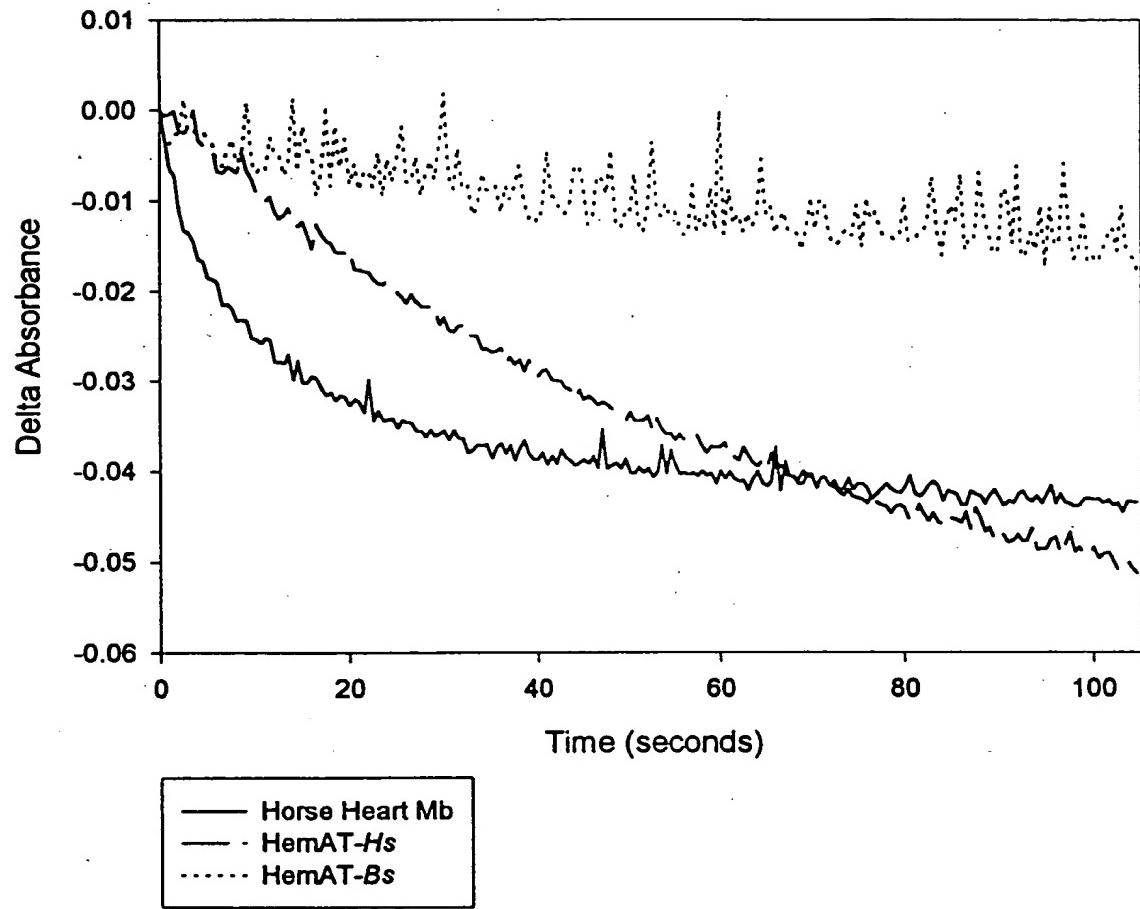


FIGURE 8